

ASX/Media Announcement 30 May 2017

# NEW RESOURCE ESTIMATION FOR PAGUANTA

- JORC 2012 Mineral Resource estimate for the Patricia deposit of 2.4Mt at 5.0% zinc, 1.4% lead, 88 g/t silver and 0.3 g/t gold (or 2.4Mt at 8.0% zinc equivalent).
- Almost 50% of the resource in the Measured and Indicated categories.
- 190,000 tonnes of contained zinc equivalent (Zn Eq) metal.
- Resource remains open at depth and along strike to the south east.
- Steeply plunging high-grade ore shoots are evident in the resource.
- Recent deep diamond hole (PTTDD-17-136) has returned a very high grade intercept of 0.75m at 12% zinc, 7.5% lead, 1,765 g/t silver and 1.7 g/t gold (526.9m to 527.65m) amongst several other wider intercepts in one of these shoot locations.
- Infill drilling to test significant voids in the new resource being planned, with a further updated resource estimate to be delivered by the end of 2017.
- The Company will consider extensional drilling down plunge of the high-grade shoots.

**Golden Rim Resources Ltd** (ASX: GMR) (Golden Rim, Company) advises that it has updated the Mineral Resource estimate for the Patricia Zinc-Silver-Lead deposit (Patricia) at the Paguanta Project (Paguanta) in Chile.

Golden Rim's Managing Director, Craig Mackay, said "We are pleased with the outcome of the recent drilling program which has helped deliver a robust JORC 2012 resource estimate for Patricia. The new resource provides us with a much improved understanding of the geometry, grade distribution and continuity of the significant zinc-silver-lead-gold mineralisation and provides the Company with a sound basis for moving forward."

"There are large gaps in the drilling at Patricia which has resulted in voids in the new resource, particularly in areas where substantial additional mineralisation was recently discovered by Golden Rim. Further, the resource remains open at depth and along strike."

"We believe further infill drilling and extensional drilling focussed on improving the overall grade will provide us with a solid increase to the tonnes and grade of the Mineral Resource before the end of 2017" said Mr Mackay.

The resource estimate, based on historical data and Golden Rim's recently completed seven hole (3,189m) diamond drilling program, was independently completed by Mining One Consultants (Mining One). The results of Golden Rim's 13 hole (3,462m) Reverse Circulation (RC) drilling program, which remaining pending, have not been included in the updated resource estimate.



The results of the new resource estimate at various Zn Eq cut-off grades are provided in Table 1 and a Zn Eq (%) grade tonnage curve is presented as Figure 1.

Zn Eq (%) Cut-off	Tonnes	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)	ZnEq (%)	Contained ZnEq (tonnes)
3	6,198,000	3.4	1.1	67	0.2	5.6	347,000
4	4,134,000	4.1	1.2	76	0.3	6.7	277,000
5	3,148,000	4.6	1.3	82	0.3	7.4	233,000
6	2,380,000	5.0	1.4	88	0.3	8.0	190,000
7	1,093,000	6.0	1.8	108	0.3	9.6	105,000

**Table 1.** Total Mineral Resource Estimates by Cut-off Grade

Notes:

1. Tonnages and grades are rounded. Discrepancies in totals may exist due to rounding.

2. Zinc equivalent (Zn Eq.) has been calculated using the metal selling prices, recoveries and other assumptions contained in Appendix 1. It is Golden Rim's opinion that all elements included in the metal equivalent calculation have a reasonable potential to be recovered and sold.

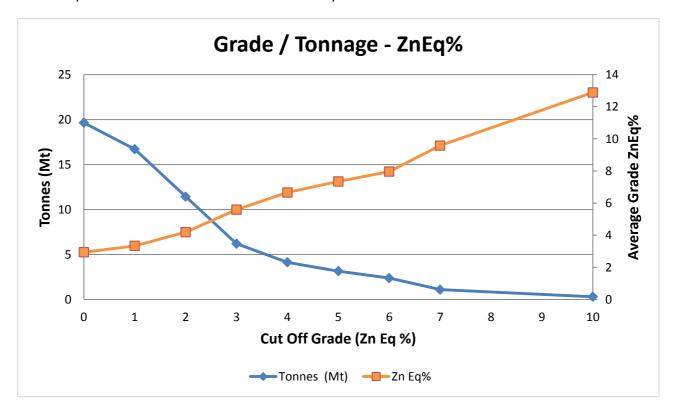


Figure 1. Patricia resource – Zn Eq. (%) Grade Tonnage Curve

Golden Rim has elected to use the 6% Zn Eq resource of **2.4Mt at 5.0% zinc, 1.4% lead, 88 g/t silver and 0.3 g/t gold** (or **2.4Mt at 8.0% Zn Eq**) as the basis for its on-going work at Patricia. The resource estimate has been compiled by Mining One in accordance with the 2012 Edition of the JORC Code and supersedes the previous JORC 2004 Mineral Resources compiled by Golder & Associates for the previous owner in 2012. Details on the new resource estimate are provided in Appendix 1.



Resource categories for the new resource are provided in Table 2. Almost **50%** of the new resource has been categorised as Measured and Indicated. A figure depicting the resource block model at Patricia is included as Figure 2.

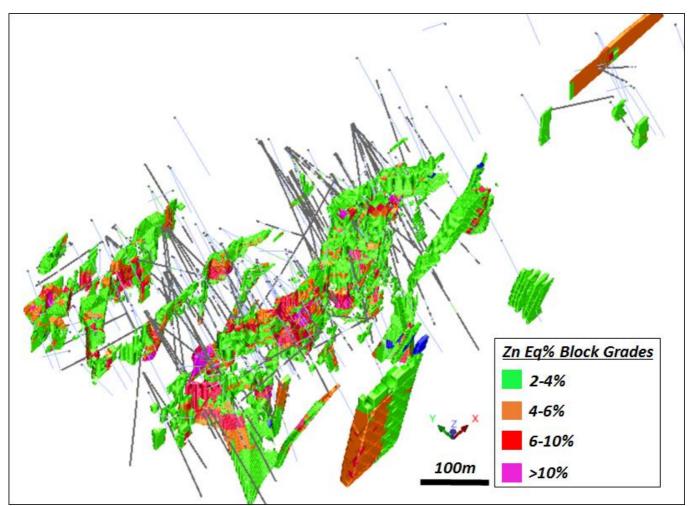
Resource Category	Tonnes	Zn (%)	Pb (%)	Ag (g/t)	Au (g/t)	Zn Eq (%)
Measured (M)	493,300	5.5	1.8	88	0.3	8.6
Indicated (I)	612,700	5.1	1.8	116	0.3	8.8
M+I	1,106,000	5.3	1.8	104	0.3	8.7
Inferred	1,279,700	4.8	1.1	75	0.3	7.3
Total	2,379,700	5.0	1.4	88	0.3	8.0

Table 2. Patricia Mineral Resource	(>6% Zn Eq) by Resource Category

Notes:

1. Tonnages and grades are rounded. Discrepancies in totals may exist due to rounding.

2. Zinc equivalent (Zn Eq.) has been calculated using the metal selling prices, recoveries and other assumptions contained in Appendix 1. It is Golden Rim's opinion that all elements included in the metal equivalent calculation have a reasonable potential to be recovered and sold.



*Figure 2.* Patricia resource block model with block grades (looking NE). A number of shoots of higher grade mineralisation are evident and require further investigation.



By using the 6% Zn Eq cut-off grade, Golden Rim has been able to incorporate the significant mineralisation at Patricia in a single resource estimate, whereas the previous estimates utilised both zinc and silver cut-off grades and provided separate resources for the more zinc-rich and more silver-rich portions of the deposit.

In the new resource estimate, Mining One applied the prudent measure of introducing a 400 g/t silver top cut to the silver assays within the dataset. A total of 51 silver assays out of 5,565 assays were cut to 400 g/t (0.9%) which has resulted in a marginally lower silver grade in the new resource compared to the previous estimates where no top cut seems to have been utilised.

Some of the cut silver assays were very high grade. Golden Rim has received the silver reassays and the gold assays for the recently completed diamond hole PTTD-17-136 (Figure 3). The assays highlighted a deep high grade intercept of **0.75m at 12% zinc**, **7.5% lead**, **1,765 g/t silver and 1.7 g/t gold** (526.9m to 527.65m) amongst several other broader intercepts on the Cathedral Vein previously reported by Golden Rim<sup>1</sup>.

#### **Resource Upside**

Golden Rim's recently completed diamond drilling has outlined significant extensions to the mineralisation at Patricia at depth, along strike to the south east, and in the newly discovered Lell Vein to the south of the deposit. There are currently large gaps in the drilling in these areas and as such Golden Rim has been limited to the extent it can include the mineralisation in these areas in the new resource estimate. Infill drilling is planned so additional mineralisation can be included in a further updated resource estimate planned by the end of 2017.

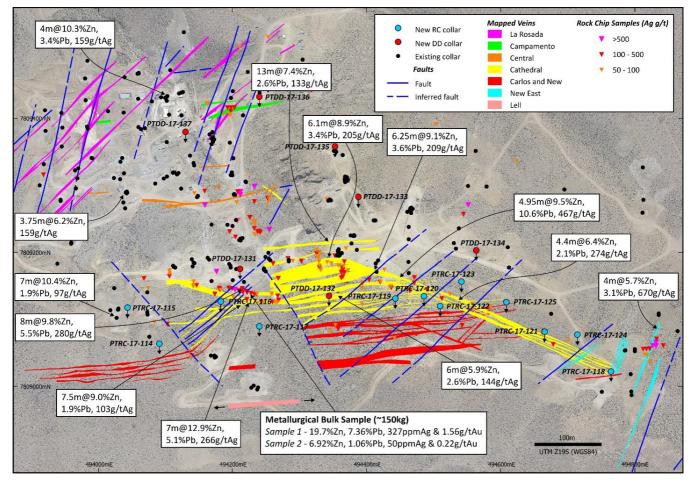
The new resource estimate for Patricia remains open at depth and along strike. Golden Rim is awaiting assays for the RC holes recently drilled along strike to the south east along the recently mapped extension to the Cathedral Vein (Figure 3).

The new resource model seems to highlight a number of higher grade steeply plunging ore shoots at Patricia. Golden Rim will further assess the geometry and distribution of these zones of high grade mineralisation and conduct follow-up drilling.

Regionally, the Cumbre prospect, located 1km south of Patricia has become a high priority target for the next drilling campaign. Cumbre contains highly base metal anomalous, east-west-trending sheeted veins (similar orientation to the veining at Patricia), which outcrop at an elevation some 200m higher than the Patricia vein outcrops. It is possible that Cumbre, which has seen no drilling to date, may host similar epithermal zinc-silver-lead mineralisation as Patricia, but where the entire vertical extent of the mineralisation could be preserved, whereas at Patricia, Golden Rim believes the very upper part of the deposit has been eroded.

<sup>&</sup>lt;sup>1</sup> See Golden Rim's ASX Announcement "Diamond Drilling Significantly Extends Mineralisation at Paguanta" dated 3 May 2017





*Figure 3.* Plan showing the mapped zinc-silver-lead veins at Patricia and the location of Golden Rim's recent diamond drilling (red circles) and RC drilling (blue circles).

### **Resource Estimation Details can be found in Appendices 1 and 2.**

- ENDS -

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#### **Competent Persons Statement**

The information in this report that relates to the estimation and reporting of the Patricia Resources is based on information compiled by Mr Stuart Hutchin, a Competent Person who is a member of the Australian Institute of Geoscientists and a full-time employee of Mining One Consultants Pty Ltd. Mr Hutchin has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Hutchin consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to exploration results is based on information compiled by Mr Craig Mackay, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy. Mr Mackay is a full-time employee of Golden Rim Resources Ltd. Mr Mackay has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Mackay consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **Forward Looking Statements**

Certain statements in this document are or maybe "forward-looking statements" and represent Golden Rim's intentions, projections, expectations or beliefs concerning among other things, future exploration activities. The projections, estimates and beliefs contained in such forward looking statements necessarily involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of Golden Rim, and which may cause Golden Rim's actual performance in future periods to differ materially from any express or implied estimates or projections. Nothing in this document is a promise or representation as to the future. Statements or assumptions in this document as to future matters may prove to be incorrect and differences may be material. Golden Rim does not make any representation or warranty as to the accuracy of such statements or assumptions.



#### Appendix 1. Resource Estimate Details

#### **Project Background**

Golden Rim Resources Ltd (Golden Rim, Company) acquired 100% of Paguanta Resources (Chile) SA (PRC) in July 2016. PRC holds 70% of the shares in Compania Mineral Paguanta SA, which holds the mineral concessions at the Paguanta Zinc-Silver-Lead Project (Paguanta). Paguanta is comprised of 14 exploitation concessions covering a total surface area of 3,900ha, and 8 exploration concessions covering a total surface area of 2,100ha.

Paguanta is located in the Tarapacá Region of northern Chile, approximately 120km northeast of Iquique and 30km west of the Chile-Bolivia border. Paguanta is situated approximately 40km northeast of BHP Billiton's Cerro Colorado Mine, which has a Mineral Resource of 400Mt @ 0.62% copper for 5.5Blb of copper and annual copper cathode production of approximately 175Mlb.

The Patricia zinc-silver-lead deposit (Patricia), located in the south of the project area, is the best explored area at Paguanta. The epithermal-style mineralisation at Patricia is hosted in andesite and rhyolite volcanic rocks and consists of silver-lead-zinc sulphides in multiple mineralised vein structures that are typically steep dipping, 3m to 15m in width, and have an east/west orientation. The style of mineralisation within the vein structures includes massive to semi-massive sulphide replacement, breccia zones and stockwork vein zones.

#### New Resource Estimate

A site visit was completed by Mining One Consultants (Mining One) in April 2017 and the Patricia site and core samples, located within the core storage facility, were inspected. A resource estimate for the Patricia deposit was independently completed by Mining One in May 2017.

A summary of the diamond (DDH) and RC drilling completed over multiple drilling campaigns and used in the resource estimate is provided in Table 3.

Company	Year	Hole Type	Number of holes	Number of metres	Hole ID's
Herencia	2008 (and earlier)	RC	107	12,606	PTRC001 – PTRC107
		DDH	34	5,248	PTDD001 to PTDD034
Herencia	2010	DDH	24	5,813	PTDD034 – PTDD058
Herencia	2011	RC	6	554.00	PTRC108 – PTRC113
		DDH	73	15,055	PTDD059 – PTDD130
Golden Rim	2017	DDH	7	3,188	PTDD-17-131 - PTDD-17-137
GRAND TOTAL			251	42,464	

**Table 3.** Patricia Drilling Summary

The location of drill holes used in the resource estimate are depicted on Figure 4.

The strike length of the mineralised domain modelled is approximately 1,000m long by 600m wide with an average thickness of 3m to 10m. The resource domain is located from near the surface topography and extends to a depth of 600m below surface.



Grades vary based on the extent of sulphide content and alteration strength within the mineralised zones. Overall the lead and zinc grades are relatively consistent within the modelled domains, silver shows more variability due to its higher nugget characteristics.

The resource model was constructed using Surpac software. Mineralised domain wireframes were constructed using a combination of zinc equivalent grade (>1%) and the geology boundary of the epithermal alteration to guide the interpretation. A minimum domain thickness of 2m was used, this corresponds to the minimum practical mining width within an underground mining scenario.

After review of the assay dataset statistics it was assessed that no top cutting was required the lead and zinc components however a 400 g/t top cut was applied to the silver assays within the dataset. A total of 51 silver assays out of 5,565 were cut to 400 g/t (0.9%). The top cut was based on assessment of the probability plot and histogram.

A composite file was created using a composite length of 1m. The median sample length within the assay dataset is also 1m.

Variograms for each attribute were created for the modelled domain with the results of these used to assist with estimation of resources. Ranges within the variogram for zinc and lead were 30m for the major axis. Silver showed shorter ranges of 10m indicating the lower continuity of the silver mineralisation within the ore system. Variogram results are shown in Table 4.

Table 4. Patricia Variogram Results

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Nugget	Sill	Range	Major/Semi	Major/Minor	
0.25	0.80	30	1	5	

An ordinary kriged estimate was run for zinc (%), lead (%), silver (g/t) and gold (g/t), an inverse distance estimate was run for copper (g/t), arsenic (g/t), iron (%) and sulphur (%). Calculated fields of zinc equivalent were also included the model.

Three estimation passes were using 10m, 30m and 100m search radii. Minimum composites used were 2 for the larger search radii and 3 for the tighter search. Maximum composites used for the larger radii search were 12 and 6 for the tighter search radii.

The estimation process was validated by comparing global block grades with the average composite grades, visual checks comparing block grades with raw assay data, volume checks of the ore domain wireframe vs the block model volume.

The validation steps taken indicate that the block estimates are a realistic representation of the source assay data and that the block model volumes are valid in comparison to the modelled interpretation.

The resources were reported above a 6% Zn Eq cut-off grade. This is assessed as reasonable given the proposed underground mining methods. The Zn Eq grades were calculated using the following formula:

Zn Eq%= (Zn %) + (Pb %\*0.63) + (Ag g/t\*0.019) + (Au g/t\*1.38)



The metal prices used for the zinc equivalent formula were:

Zinc - \$US 1.1911/lb Lead - \$US 0.9411/lb Silver - \$US 17.07/oz Gold - \$US 1,252/oz

The metallurgical recoveries included in the zinc equivalent formula were the non-optimised metallurgical recoveries were derived from previous test work at Patricia and include 82%, 80% and 90% for zinc, lead and silver respectively. For gold a 90% recovery has been assumed, which Golden Rim believes is a reasonable average for an epithermal style of deposit.

It is Golden Rim's opinion that all elements included in the metal equivalent calculation have a reasonable potential to be recovered and sold.

The resources have been estimated using a minimum thickness of 2m for the domain shapes, this minimum thickness therefore accounts for any dilution in zones that are less than this thickness. The proposed mining method is via underground mining techniques, the model parameters are therefore deemed to be suitable for this type of potential mining operation.

The resources have been classified according to the drill density and the modelled continuity of both the thickness and grade of the mineralized zones in the view of the competent geologist. Measured, Indicated and Inferred blocks have been reported for the resource. These are based on an average distance to samples of less than 30m for Measured, between 30m and 80m for Indicated and greater than 80m for Inferred. Wireframe domains were built for the Measured and Indicated domains in order to code the model for resource classification.

The resource classification is deemed appropriate in relation to the drill spacing and geological continuity of the mineralized domains.

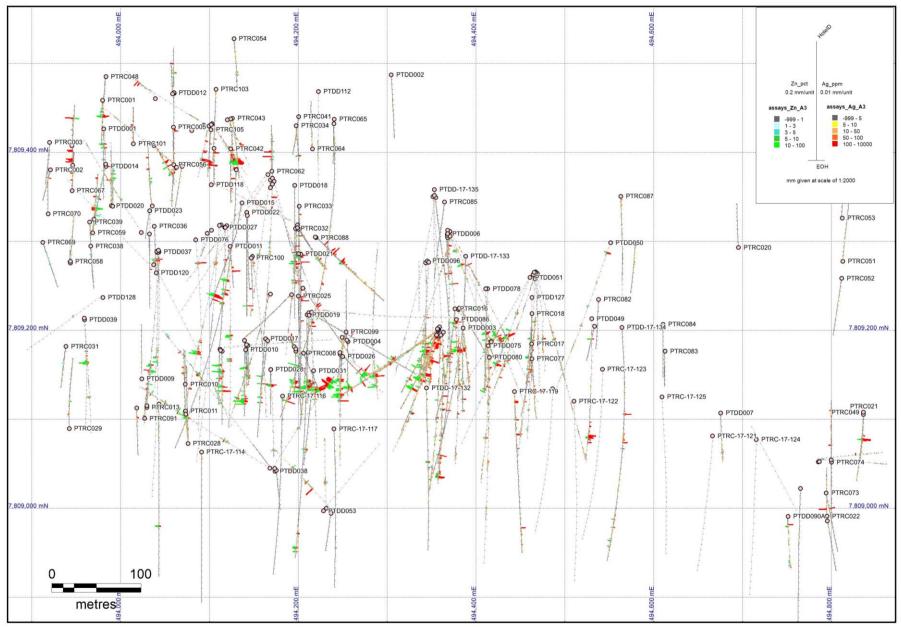


Figure 4. Patricia drill holes used for the resource estimate with downhole zinc and silver geochemistry in plan view.



# Appendix 2: JORC Code (2012 Edition), Assessment and Reporting Criteria

#### Section 1: Sampling Techniques and Data

Criteria	JORC Code Explanation	Explanation
Sampling Techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation.</li> </ul>	<ul> <li>The sampling described in this report refers to diamond core (DD) and reverse circulation (RC) drill samples.</li> <li>The DD drilling was sampled using a geologic lithology and/or mineralization boundary bracketing system whereby samples are no less than 0.5m and no more than 2.0m</li> <li>The DD core was cut in half with a core saw on site. Half of the core was sampled, retaining the other half on site.</li> <li>The RC drilling was used to obtain 1m samples (5kg), from which 1kg was pulverised to produce sample for ICP analysis and a 30g charge for Au fire assay.</li> <li>The RC samples were reduced to a 5kg sample by riffle splitting on site.</li> <li>The majority of samples were dry and measures were taken to avoid wet RC drilling.</li> <li>Samples were all collected by qualified geologists or under geological supervision.</li> <li>The samples are judged to be representative of the rock being drilled.</li> <li>Location of each hole was recorded in WGS84 by hand held GPS with positional accuracy of approximately +/- 3 metres.</li> <li>At the completion of the drilling campaign surveying with a differential GPS, which is accurate to +/-0.1m in X, Y and Z will be carried out on all holes drilled. Location data was collected in WGS84.</li> <li>All drilling samples were submitted to ALS Laboratory Group, Chile for preparation and analysis.</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>DD drilling was carried out using a BBS-56 rig drilling a HQ-3 (61mm) diameter hole.</li> <li>The DD core was collected in aluminium boxes; labelled with the name of the drill hole, box number and from-to meterage. Drill core strings are identified at the start and end of each string with wooden blocks.</li> <li>RC drilling was carried out using a SCHRAMM ED-130 rig.</li> <li>A PR54 face sampling Hammer drilling a 5 7/8" diameter hole was used more than</li> </ul>



Criteria	JORC Code Explanation	Explanation
		85% of the time. When needed, a E58516 tricone bit was used drilling a 5 1/2" diameter hole.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Core recovery was carried out on site by personnel responsible for drill hole control by measuring recovered core lengths versus drilled lengths. RQD was also performed. This information was registered on the wooden core blocks and the drilling reports.</li> <li>RC recoveries are logged and recorded in the database. Overall recoveries are &gt;80% for the RC. There are no significant sample recovery problems. A technician is always present at the rig to monitor and record recovery.</li> <li>RC samples were visually checked for recovery, moisture and contamination.</li> <li>The style of mineralisation, with common higher-grade, requires good recoveries to evaluate the mineralisation adequately. The consistency of the mineralised intervals and density of drilling is considered to prevent any sample bias issues due to material loss or gain.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Detailed geological logging has been carried out on all drill samples, recording lithology, weathering, structure, veining, mineralisation, grainsize and colour.</li> <li>Logging of sulphide mineralisation and veining is quantitative.</li> <li>The geological logging was done using a standardised logging system. This information and the sample details were entered in the drilling database.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate</li> </ul>	<ul> <li>For DD drilling, the standard sample interval was between 0.5-2m lengths of half core. When duplicate samples were taken quarter core samples were taken. The sampling interval may be broken at changes in geology or mineral zone, so the length of the sample interval can vary.</li> <li>A technician cut the core in half along the axis using a diamond cutting saw, at intervals defined by the geologist during logging.</li> <li>Half of the core is stored in the tray for backup purposes, while the other half is collected in a plastic bag for chemical analysis. The bag includes two tickets (one that is loose inside sample bag and one which is stapled to interior of bag) which</li> </ul>



Criteria	JORC Code Explanation	Explanation
	to the grain size of the material being sampled.	identify the sample number. The sample numbers are also written on both sides on the exterior of the sample bag.
		• The geologist leaves one ticket in the core tray at the beginning of each sample interval and stores a duplicate of the ticket with the same number, hole-id, from, to, etc.
		• Samples were then put into sealed sacks (max 5 samples per bag) and stored securely on site at project.
		• When 3 full sample lots (complete drill holes) were finished (3700-4700kilos), the samples were transported by road to ALS Global laboratory in Antofagasta (usually once every two weeks) in a 5000k cargo truck.
		RC samples were collected on the rig using a two sided riffle (13 per side) splitter. All samples were dry.
		A hydrocyclone with riffles was used during wet sampling.
		• The standard sample interval was 1m.
		• Duplicate samples were taken at regular intervals (4 every 60 samples) by putting the sample through a riffle splitter.
		• When a drill hole was complete, the samples were transported by road to ALS Global laboratory in Antofagasta (usually once every two weeks) in a 7,000kg cargo truck.
		• The sample preparation for all samples follows industry best practice.
		• At the laboratory, all samples were weighed, dried and crushed to -2mm in a jaw crusher. A 1kg split of the crushed sample was subsequently pulverised in a ping mill to achieve a nominal particle size of 90% passing 75um.
		• Field QC procedures involve the use of certified reference material as assay standards and blanks. The insertion rate of these averaged 1:20.
		• The sample sizes are appropriate to correctly represent the style of mineralisation, the thickness and consistency of the intersections.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	• The laboratory used Agua Regia digestion and analysis by High Grade Four Acid ICP-AES(ME-ICP61a) for 33 elements. Zn and Pb (20-100000ppm), Ag (1-200ppm)
	<ul> <li>For geophysical tools, spectrometers,</li> </ul>	Over limit results for Zn, Pb, and Ag were



Criteria	JORC Code Explanation	Explanation
	<ul> <li>handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>analysed using AAS (method OG62) to provide ore grade results in the ranges of Zn and Pb (0.001-30%), Ag (1-1500ppm) (g/t).</li> <li>Sample preparation checks for fineness were carried out by the laboratory as part of their internal procedures to ensure the grind size of 90% passing 75 microns.</li> <li>Internal laboratory QAQC checks were reported by the laboratory.</li> <li>Review of the internal laboratory QAQC suggests the laboratory is performing within acceptable limits.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Sample data was compiled and digitally captured by the company's geologists.</li> <li>The compiled digital data is verified and validated by the Company's database geologist.</li> <li>Reported results were compiled by the Company's Senior Geologists and the Managing Director.</li> <li>There were no adjustments to the assay data.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Down-hole surveys were completed at the end of every hole (where possible) using a Reflex EZ Trac down-hole survey tool. Measurements were taken at approximately every 15-20 meters depending on length of the hole.</li> <li>At the completion of the program all holes are surveyed with a DGPS, which has location accuracy of +/- 0.1m, X, Y and Z. Location data was collected in WGS84</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The drill intercepts are irregularly spaced.</li> <li>There was no sample compositing in samples reported. At the completion of the program, all assay results for Zn, Pb and Ag will be compiled the company may decide to do composite samples for Au.</li> <li>Mineral Resource Estimate (JORC 2012) was calculated using 2m composite data subdivided by the geological interpretation.</li> <li>The method used to estimate mineral resources for Zinc, Lead, Silver and Gold was Ordinary Kriging.</li> <li>Detailed visual and statistical review of the mineral resource was completed as part of routine validation, and the mineral resources is considered globally robust.</li> </ul>
Orientation of data in relation	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this</li> </ul>	All drill holes reported here were drilled     approximately at right angles to the strike



Criteria	JORC Code Explanation	Explanation
to geological structure	<ul> <li>is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>of the target mineralisation.</li> <li>No orientation based sampling bias has been identified in the data at this point.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples are securely stored on site prior to road transport by Company personnel or ALS Global personnel to the laboratory in Antofagasta, Chile.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	• Review were undertaken by Golder and Associates as part of the 2013 Feasibility Study and by Mining One for the 2017 resource estimate.

## Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Explanation
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The RC and DD drilling results are from the Paguanta Project.</li> <li>The Paguanta Project is comprised of 14 exploitation concessions covering a total surface area of 3,900ha, and 8 exploration concessions covering a total surface area of 2,100ha.</li> <li>Paguanta Resources (Chile) SA (PRC) is a wholly owned subsidiary of Golden Rim. PRC holds 70% of the shares in Compania Mineral Paguanta SA, which holds the mineral concessions at the Paguanta</li> </ul>
		<ul><li>Project.</li><li>Tenure is in good standing.</li></ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	• The area that is presently covered by the Paguanta Project has undergone some previous mineral exploration.
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>Paguanta is situated in the Tarapacá Region of northern Chile, approximately 120km northeast of Iquique and 30km west of the Chile-Bolivia border. Paguanta is situated approximately 40km northeast of BHP Billiton's Cerro Colorado Mine, which has a Mineral Resource of 400Mt @ 0.62% copper for 5.5Blb of copper and annual copper cathode production of approximately 175Mlb.</li> <li>The Patricia zine silver load deposit</li> </ul>
		<ul> <li>The Patricia zinc-silver-lead deposit, located in the south of the Project area, is the best explored area at Paguanta.</li> <li>The epithermal-style mineralisation is</li> </ul>



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		hosted in andesite and rhyolite volcanic rocks and consists of silver-lead-zinc sulphides in multiple mineralised vein structures that are typically steep dipping, 3m to 15m in width, and have an east/west orientation. The style of mineralisation within the vein structures includes massive to semi-massive sulphide replacement, breccia zones and stockwork vein zones.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul> <li>Drill hole information for a further intercept for hole PTTD-17-136 provided in ASX Announcement dated 3 May 2017 "Diamond Drilling Significantly Extends Mineralisation at Paguanta".</li> <li>A summary of drill holes that form the basis of the resource information in this announcement are tabulated in Table 3 and depicted on Figure 4 (which incorporates Hole ID, Easting, Northing and Zn &amp; Ag Assay data for the mineralised intercepts as downhole histograms).</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Samples were taken at 1m intervals, except when there was a geological change. In this case, the sample was taken to the geological boundary.</li> <li>No weighting or high grade cutting techniques have been applied to the data reported.</li> <li>Assay results are generally quoted rounded to 1 decimal place.</li> <li>Metal equivalent values are not reported in this announcement.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should</li> </ul>	• The orientation of the mineralised zone has been established and the drilling was planned in such a way as to intersect mineralisation in a perpendicular manner.



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	be a clear statement to this effect (eg 'down hole length, true width not known').	
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul> <li>Maps are provided in the main text.</li> </ul>
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul> <li>All sample results containing significant assays are reported the table in the main text.</li> </ul>
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	There is no other exploration data which is considered material to the results reported in the announcement.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step- out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	• Further infill, downdip and lateral extension, as well as exploration drilling is planned to follow up the results reported in this announcement.

Section 3 Estimation and Reporting of Mineral Resources (Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>The survey, sampling and logging data was electronically imported into the resource database.</li> <li>A visual check was also made of the drill traces, assay and logging data in the 3D environment of Surpac to ensure that results correlated between drill holes and were in line with the geological interpretation and mineralization continuity.</li> </ul>
Site visits	Comment on any site visits undertaken by	A site visit was completed by Stuart Hutchin



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	<ul><li>the Competent Person and the outcome of those visits.</li><li>If no site visits have been undertaken indicate why this is the case.</li></ul>	<ul> <li>between the 8<sup>th</sup> April and the 10<sup>th</sup> April 2017.</li> <li>The Paguanta site and core samples located within the core storage facility were inspected.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>The confidence in the overall geological interpretation is moderate given the often-irregular distribution of the epithermal style of mineralisation, this is normal for this type of deposit. The interpretation on section does however generally show good continuity between the average 40m x 40m drill spacing coverage.</li> <li>The mineralisation occurs with an epithermal system lithologies. Grades vary based on the extent of sulphide content and alteration strength within the mineralised zones. Overall the lead and zinc grades are relatively consistent within the modelled domains, silver shows more variability due to its higher nugget characteristics.</li> </ul>
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The strike length of the mineralised domain modelled is approximately 1,000m long by 600m wide with an average thickness of 3- 10m. The resource domain is located from near the surface topography and extends to a depth of 600m below surface.
Estimation and modelling techniques	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> </ul>	<ul> <li>The resource model was constructed using Surpac software. Mineralised domain wireframes were constructed using a combination of zinc equivalent grade (&gt;1%) and the geology boundary of the epithermal alteration to guide the interpretation. A minimum domain thickness of 2m was used, this corresponds to the minimum practical mining width within an underground mining scenario.</li> <li>After review of the assay dataset statistics it was assessed that no top cutting was required the lead and zinc components however a 400ppm top cut was applied to the silver assays within the dataset. A total of 51 silver assays out of 5565 were cut to 400pm (0.9%). The top cut was based on assessment of the probability plot and histogram.</li> <li>A composite file was created using a composite length of 1m. The median sample length within the assay dataset is also 1m.</li> <li>Variograms for each attribute were created for the modelled domain with the results of these used to assist with estimation of resources.</li> <li>Ranges within the variogram for zinc and</li> </ul>



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Criteria	<ul> <li>JORC Code explanation</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>lead were 30m for the major axis. Silver showed shorter ranges of 10m indicating the lower continuity of the silver mineralisation within the ore system.</li> <li>Variogram results are shown in the table below.</li> <li> 10.25 <ul> <li>0.80</li> <li>30</li> <li>1</li> <li>5</li> </ul> </li> <li>An ordinary kriged estimate was run for Zn%, Pb%, Ag ppm and Au ppm, an inverse distance estimate was run for Cu ppm, As ppm, Fe % and S%. Calculated fields of zinc equivalent were also included the model. <li>Three estimation passes were using 10m, 30m and 100m search radii. Minimum composites used were 2 for the larger search radii and 3 for the tighter search. Maximum composites used for the larger</li> </li></ul>
Moioturo		<ul> <li>radii search were 12 and the 6 for the tighter search radii.</li> <li>The estimation process was validated by comparing global block grades with the average composite grades, visual checks comparing block grades with raw assay data, volume checks of the ore domain wireframe vs the block model volume.</li> <li>The validation steps taken indicate that the block estimates are a realistic representation of the source assay data and that they block model volumes are valid in comparison to the modelled interpretation.</li> </ul>
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul> <li>The resource tonnages have been estimated on a dry basis</li> </ul>
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	<ul> <li>The resources were reported above a 6% ZnEq cut –off grade. This is assessed as reasonable given the proposed underground mining methods.</li> <li>The Zn Eq grades were calculated using the following formula: ZnEq%= (Zn%) + (Pb%*0.63) + (Ag g/t*0.019) + (Au g/t*1.38)</li> <li>The metal prices used for the zinc equivalent formula were:</li> <li>Zinc - \$US 1.1911/lb</li> <li>Lead - \$US 0.9411/lb</li> <li>Ag - \$US 17.07/oz</li> <li>Au - \$US 1252/oz</li> <li>The metallurgical recoveries included in the</li> </ul>



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Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining</li> </ul>	<ul> <li>zinc equivalent formula were:</li> <li>Zinc - 82%</li> <li>Lead - 80%</li> <li>Silver - 90%</li> <li>Gold - 90%</li> <li>The resources have been estimated using a minimum thickness of 2m for the domain shapes.</li> <li>This minimum thickness accounts for any dilution in zones that are less than this thickness.</li> <li>The proposed mining method is via underground mining techniques; the model parameters are deemed to be suitable for this type of potential mining operation.</li> </ul>
Metallurgical factors or assumptions	<ul> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul> <li>Some limited metallurgical test work has been completed as part of the feasibility study compiled by Golder.</li> <li>Preliminary data was collected on metal recoveries which has been used in the zinc equivalent formula to report the resources.</li> </ul>
Environmental factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul> <li>The concession license conditions currently permit exploration activities; a mining license will be required prior to commencement of mining activities.</li> <li>Given the extensive mining within the region it is assessed that obtaining a mining permit is realistic in the future.</li> </ul>
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the	<ul> <li>The bulk densities for the ore and waste rock types were estimated using the Archimedes method, that is (Dry Weight / (Dry Weight – Wet Weight).</li> </ul>



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	<ul> <li>measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>The density values were estimated from the source density values using the nearest neighbour method, this assists with accounting for local variability of rock density values.</li> <li>These values are based on a density measurement dataset totalling 2,542 in both mineralised and waste domains.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>The resources have been classified according to drill density and the modelled continuity of both the thickness and grade of the mineralized zones in the view of the competent geologist.</li> <li>Measured, Indicated and Inferred blocks have been reported for the resource. These are based on an average distance to samples of less than 30m for measured, between 30m and 80m for indicated and greater than 80m for inferred.</li> <li>Wireframe domains were built for the measured and indicated domains to code the model for resource classification.</li> <li>The resource classification is deemed appropriate in relation to the drill spacing and geological continuity of the mineralized domains.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul> <li>The source data used to estimate the resources has previously been reviewed by Golder as part of the feasibility study work completed in 2012.</li> <li>Mining One have also completed an audit of the drilling and sampling data in 2012 as part of a due diligence review.</li> </ul>
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant to technical and economic evaluation. Documentation should include assumptions made and</li> </ul>	The resource estimate is deemed to be an accurate reflection of both the geological interpretation and tenure of mineralization within the deposit.



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	<ul> <li>the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	